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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/616,681	07/09/2003	Jinsheng Gu	DOGO.P013	2576
53186	7590	07/27/2006	EXAMINER	
COURTNEY STANIFORD & GREGORY LLP			HARPER, LEON JONATHAN	
P.O. BOX 9686			ART UNIT	PAPER NUMBER
SAN JOSE, CA 95157			2166	

DATE MAILED: 07/27/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/616,681	<b>Applicant(s)</b> GU ET AL.	
	<b>Examiner</b> Leon J. Harper	<b>Art Unit</b> 2166	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 05 May 2006.
- 2a) ☐ This action is FINAL.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>7/7/06</u> . | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

1. The amendment filed 5/5/2006 has been entered. Claims 1,2,4,6 have been amended. No claims have been canceled. Accordingly, claims 1-13 are pending in this office action.

#### ***Response to Arguments***

Applicant's arguments with respect to claims 1-13 have been considered but are moot in view of the new ground(s) of rejection.

#### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

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(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-13 are rejected under 35 U.S.C. 102(b) as being anticipated by US 6233589 (hereinafter Balcha).

As for claim 1 Balcha discloses: an optimizing system that generates a difference-file between an original byte stream and a new byte stream by identifying replacement content in a first area of the new byte stream (See column 4 lines 48-53 and See column 6 lines 21-29), wherein the replacement content includes a group of bytes of the new byte stream identified as at least one of byte insertions and byte

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replacements in an operation array (See column 7 lines 5-10), identifying content similarities between the replacement content and at least one of the original byte stream and a second area of the new byte stream, and encoding information of the content similarities to the difference file (See column 7 lines 45-50 note: the base file contains similarities).

As for claim 2 Balcha discloses: means for receiving an original byte stream that is a segment of an original file and a new byte stream that is a segment of a new file wherein the new file includes an updated version of the original file (See column 7 lines 5-12 ); means for identifying replacement content of the new byte stream wherein replacement content includes a group of bytes of the new byte stream identified as at least one of byte insertions and byte replacement in an operation array means for comparing the replacement content and portions of the new byte stream and identifying a first set of content similarities resulting from file comparison (See column 7 lines 5-12 and column 7 lines 45-50); means for comparing the replacement content and portions of the original byte stream and identifying a second set of content similarities resulting from the comparison; and means for generating the difference file by encoding information of the first set and second set of content similarities (See column 7 line 65-column 8 line 7).

As for claim 3, the rejection of claim 2 is incorporated, and further Balcha discloses: means for transferring the difference file to a remote system that hosts a copy of the original file, the remote system updating the hosted copy of the original file using the difference file (See column 2 lines 5-9).

As for claim 4 Balcha discloses: receiving an original byte stream that is a segment of an original file and a new byte stream that is a segment of a new file, wherein the new file includes an updated version of the original file (See column 6 lines 25-29); identifying replacement content of the new byte stream, wherein replacement content includes a group of bytes of the new byte stream identified as at least one of byte insertions and byte replacements in an operation array (See column 7 lines 6-11); comparing the replacement content and portions of the new byte stream and identifying a first set of content similarities resulting from the comparison comparing the replacement content and portions of the original byte stream and identifying a second set of content similarities resulting from the comparison; and generating the difference file by encoding information of the first set and second set of content similarities (See column 7 line 63- column 8 line 6).

As for claim 5, the rejection of claim 4 is incorporated, and further Balcha discloses: identifying at least one first largest common sub-string (LCS) of bytes in response to the comparison; and identifying the first set of content similarities between

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the replacement content and the new byte stream using the first LCS (See column 11 55-65).

As for claim 6, the rejection of claim 5 is incorporated, and further Balcha discloses: identifying at least one second LCS in response to the comparison; and identifying the second set of content similarities between the replacement content and the original byte stream using the second LCS (See column 12 lines 10-30 note: just call this function twice).

As for claim 7, the rejection of claim 4 is incorporated, and further Balcha discloses: encoding a first edit distance between the replacement content and portions of the new byte stream; and encoding a second edit distance between the replacement content and portions of the original byte stream (See column 10 lines 38-45 and 50-65 note: base file stores lengths)

As for claim 8, the rejection of claim 7 is incorporated, and further Balcha discloses: comparing information including at least one of a number of bytes used to encode the first edit distance, a number of bytes used to encode the second edit distance, a number of bytes of the replacement content, and a degree of content similarity (See column 10 lines 50-65 note: there is also an offset and a description included in the base file)

As for claim 9, the rejection of claim 4 is incorporated, and further Balcha discloses: encoding a first edit distance between the replacement content and portions of the new byte stream and encoding a second edit distance between the replacement content and portions of the original byte stream (See column 10 lines 38-45 and 50-65 note: base file stores lengths); comparing a number of bytes used to encode the first edit distance to a number of bytes used to encode the second edit distance ((See column 10 lines 50-65 note the length tells you how many bytes); comparing the number of bytes used to encode the first edit distance to a length of the replacement content and a degree of content similarity (See column 10 lines 60-65 note: for these it is based on the crc and a displacement ); and encoding information of the first set of content similarities when the number of bytes used to encode the first edit distance is less than or equal to the number of bytes used to encode the second edit distance and a quantity formed by dividing the number of bytes used to encode the first edit distance by the length of the replacement content is less then the degree of content similarity (See column 11 lines 8-20).

As for claim 10, the rejection of claim 4 is incorporated, and further Balcha discloses: encoding a first edit distance between the replacement content and portions of the new byte stream and encoding a second edit distance between the replacement content and portions of the original byte stream (See column 9 lines 15-24); comparing

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a number of bytes used to encode the second edit distance to a number of bytes used to encode the first edit distance (See column 9 40-45); comparing the number of bytes used to encode the second edit distance to a length of the replacement content and a degree of content similarity; and encoding information of the second set of content similarities when the number of bytes used to encode the second edit distance is less than or equal to the number of bytes used to encode the first edit distance and a quantity formed by dividing the number of bytes used to encode the second edit distance by the length of the replacement content is less than the degree of content similarity (See column 10 lines 5-20).

As for claim 11 Balcha discloses: a first device including a file differencing engine that generates differences between an original version and a new version of an electronic file by: receiving an original byte stream that is a segment of the original version and a new byte stream that is a segment of the new version (See column 7 lines 5- 15); identifying replacement content of the new byte stream, wherein replacement content includes a group of bytes of the new byte stream identified as at least one of byte insertions and byte replacements in an operation array (See column 6 lines 20-30); comparing the replacement content and portions of the new byte stream and identifying a first set of content similarities resulting from the comparison; comparing the replacement content and portions of the original byte stream and identifying a second set of content similarities resulting from the comparison; generating a difference file



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including encoded information of the first set and second set of content similarities; and a file updating engine hosted on the remote devices, the file updating engine generating a copy of the new version using the difference file (See column 5 lines 22-26 noting multiple delta files and See column 6 lines 65- column 7 line 5).

As for claim 12, the rejection of claim 11 is incorporated, and further Balcha discloses: wherein the remote device includes at least one of cellular telephones, portable communication devices, personal digital assistants, personal ' computers, and portable processor-based devices (See column 2 lines 5-10 note: remote computer)

As for claim 13 Balacha discloses: identifying replacement content of a new byte stream that is a segment of the new version (See column 6 lines 25-30); wherein replacement content includes a group of bytes of the new byte stream identified as at least one of byte insertions and byte replacements in an operation array (See column 7 lines 7-13); comparing the replacement content and portions of the new byte stream and identifying a first set of content similarities resulting from the comparison; comparing the replacement content and portions of an original byte stream and identifying a second set of content similarities resulting from the comparison (See column 10 lines 50-65 note: base file contains all the similarities), wherein the original byte stream is a segment of the original version; and generating the difference file by encoding information of the first set and second set of content similarities (See column 7 lines 60-66 and column).

***Information***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Leon J. Harper whose telephone number is 571-272-0759. The examiner can normally be reached on 7:30AM - 4:00Pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hosain T. Alam can be reached on 571-272-3978. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

LJH  
Leon J. Harper  
July 8, 2006

  
MOHAMMAD ALI  
PRIMARY EXAMINER